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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,715	06/12/2006	Luis Alfredo Diaz Chavez	22080002	7944
7590 11/09/2010 Charles D Gunter Jr Whitaker Chalk Swindle & Sawyer Suite 3500 301 Commerce Street Forth Worth, TX 76102-4186				
EXAMINER LEE, REBECCA Y				
ART UNIT 1734		PAPER NUMBER		
MAIL DATE 11/09/2010		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,715

Applicant(s)

CHAVEZ ET AL.

Examiner

REBECCA LEE

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-21 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of claims

Claims 1-6 are cancelled. Claim 7 is withdrawn. Claims 8-21 are newly added.

Status of Previous rejections

The rejections of claims 2 and 4 under 35 U.S.C. 112, second paragraph have render moot by cancelling such claims.

The rejections of claims 1-6 under 35 U.S.C. 103(a) have render moot by cancelling such claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langelin (DE 4302539).

Langelin discloses a $\text{Ca}(\text{OH})_2$ slurry, which is a particular case of calco-magnesian aqueous suspension (with $x=1$, $y=0$ in claims 11 and 18), with a solid content of more than 60% by weight, and a viscosity of less than 1200 cps (1.2 Pa.s)(abstract). Langelin further teaches in one embodiment, the specific surface area of the solid is $9 \text{ m}^2/\text{g}$ (Page 3 of description, paragraph 16).

Langelin does not expressly teach the claimed specific surface area or the particle size of the solid. However, it is well held that discovering an optimum value of a result effective variable requires only routine skill in the art MPEP 2144.05 II. In the instant case, the specific surface area, which is affected by the particle size of the solid is a result effective variable since Langelin teaches a lower specific area is desired in order to decrease the viscosity of the slurry (Page 1 of description, paragraph 4). Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to have optimized the particle size and the specific surface area of Langelin, including the claimed particle size of less than or equal to 20 or 5 microns, and the claimed specific surface area of less than or equal to $5 \text{ m}^2/\text{g}$, in order to achieve desired viscosity.

Response to Arguments

Applicant's arguments filed 10/19/10 have been fully considered but they are not persuasive.

Applicant argues that it is known that increasing the grain size would reduce the specific surface area, thus, the particle size and specific surface area of Langelin would be different from claimed. However, as stated above, Langelin teaches a lower specific area is desired, and the specific surface area, which is affected by the particle size of the solid is a result effective variable, thus, it would have been obvious to one of ordinary skill in the art at the time of invention to have optimized the particle size and the specific surface area of Langelin in order to achieve desired viscosity. Since applicant has not provided any factual evidence to show that the optimization of the

surface area and the particle size in Langelin would not lead to the claimed ranges, applicant's argument is not found convincing.

Applicant also argues that the BET specific area is different from the Blaine specific surface area, thus, one of ordinary skill in the art would not motivated to reduce the BET specific area by the teaching of Langelin. However, even though BET specific area is different from the Blaine specific surface area, reducing the Blaine surface area would also result in a decreasing in the BET specific area. Thus, since Langelin teaches a low specific area is preferred, one of ordinary skill in the art would also expect a lower BET specific area is preferred.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REBECCA LEE whose telephone number is (571)270-5856. The examiner can normally be reached on Monday-Friday 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EMILY M. LE can be reached on (571)272-0903. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1734

/EMILY M LE/
Supervisory Patent Examiner,
Art Unit 1734